



National Action Plan for Energy Efficiency

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Implementing the National Action Plan for Energy Efficiency

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National Action Plan for Energy Efficiency

- Energy efficiency and today's energy challenges
- Utility sector and energy efficiency
- National Action Plan overview



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Today's Energy Challenges

- **Energy demand is growing**
- **Rising utility bills**
- **Increasing generation costs**
 - Gas and coal prices
 - Building cleaner generation
- **Reliability issues**
- **Natural gas prices increasing / volatile**
- **Carbon risk**
- **Pending large transmission and generation investments in uncertain investment world**



Energy Efficiency is a Key Part of the Solution

- Environmental
 - Lower carbon emissions and criteria pollutants
 - Lower water use
- Economic
 - Savings to customers
 - Lower cost (about half) compared to new G&T
 - Downward pressure on natural gas prices and volatility
 - Improved local economy, using local labor
 - Benefits low-income, seniors
- Utility System Benefits
 - Near-term tool with persistent, long-term benefits
 - Improved security of systems
 - Lower baseload and peak demand
 - Reduce need for “hard to site” G&T assets
 - Targeted, modular, manageable
- Risk Management
 - Diversifies utility resource portfolios
 - Zero carbon emissions

Quick, cheap, and clean resource



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EE Programs Can Be Bigger Part of Solution

- Large savings available from improving homes, buildings, industrial facilities
- Large Savings Potential – can avoid more than half of expected growth in demand for electricity and natural gas
 - From extending leading energy efficiency programs to the entire country over next 15 years
 - Save nearly \$20 billion annually on energy bills.
 - Produce more than \$250 billion in net societal benefits, accounting for the cost of EE
 - Avoid 30,000 MW -- 60 new 500 MW power plants
 - Avoid more than 400 million tons of CO₂ annually
- Achievable at half the cost of new G&T



Programs Help Overcome Key Barriers Limiting Efficiency

- ENERGY STAR
 - Helps homeowners reduce energy use by 10, 20, or 30 percent while purchasing products, undertaking home improvements, or buying a new home
 - Helps businesses, public sector, schools reduce energy use by 10 percent or more
 - Overcomes lack of information, competing vendor claims, split incentives
 - Broad-based platform with government-backed credibility and network of retailers and manufacturers to leverage
- Important utility barriers remain
 - Existing electricity and gas regulations / market rules favor supply-side resources
 - View that energy efficiency is not a reliable, cost effective resource
 - Concern that energy efficiency will raise rates
 - Lack of good documentation and guidance on demand-side programs



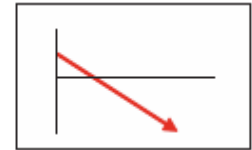
Barriers important to address – do not go away with carbon regulation



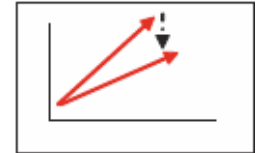
Strong Business Case for Energy Efficiency

- **Lower costs over time for customers & utilities**
 - Average bills reduced 2 – 9% over 10-year period
- **Positive net benefits to society – hundreds of millions of dollars in net present value**
- **Utility's financial health can be maintained when implementing cost-effective EE programs**
 - In some cases, requires policies to address the throughput incentive

Customer Bills –
Decrease



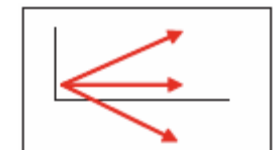
Peak Load Growth and Associated Capital Investment –
Decreases



Net Resources Savings –
Increases



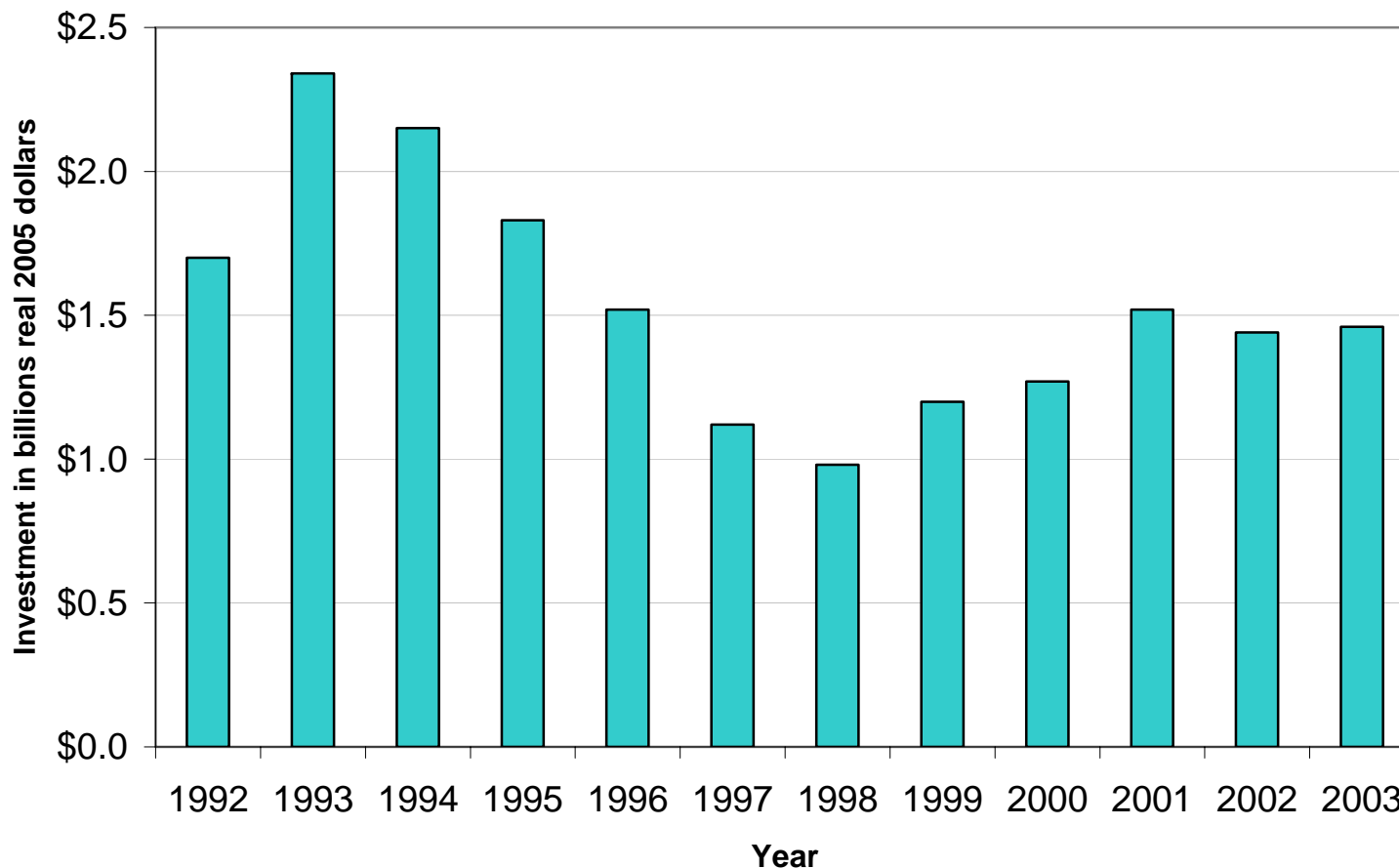
Change in Utility Earnings – Results
Vary





Utility Sector Spending on Energy Efficiency Has Declined

**Annual Spending on Utility Sector Energy Efficiency Programs 1992-2003
(2005 real dollars)**



Source: Data from ACEEE 2005 Scorecard adjusted for inflation using
U.S. Department of Labor Bureau of Labor Statistics Inflation Calculator



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National Action Plan for Energy Efficiency

- Released on July 31, 2006 at the National Association of Regulatory Utility Commissioners meeting
- Goal: To create a sustainable, aggressive national commitment to energy efficiency through gas and electric utilities, utility regulators, and partner organizations
- Over 50 member public-private Leadership Group developed five recommendations and commits to take action
- Additional commitments to energy efficiency – exceeds 90 organizations

National Action Plan for Energy Efficiency Recommendations

1. Recognize energy efficiency as a high-priority energy resource.
2. Make a strong, long-term commitment to implement cost-effective energy efficiency as a resource.
3. Broadly communicate the benefits of and opportunities for energy efficiency.
4. Provide sufficient, timely and stable program funding to deliver energy efficiency where cost-effective.
5. Modify policies to align utility incentives with the delivery of cost-effective energy efficiency and modify ratemaking practices to promote energy efficiency investments.



Leadership Group

- Sets tone and overall direction of the Action Plan
- Released Action Plan Report and Recommendations
- Co-Chaired by:
 - Commissioner Marsha Smith, NARUC First Vice President and Member of Idaho Public Utility Commission
 - Jim Rogers, President and CEO of Duke Energy
- Includes 50 leading electric and gas utilities, state utility commissioners, state air and energy agencies, energy services providers, energy consumers, and energy efficiency and consumer advocates
 - US DOE and US EPA facilitated





The Leadership Group

The Leadership Group includes 28 electric and gas utilities, 18 state agencies, and 12 other organizations:

- Alliance to Save Energy
- American Council for an Energy-Efficient Economy
- Ameren
- American Electric Power
- Arkansas Public Service Commission
- Austin Energy
- Baltimore Gas and Electric
- Bonneville Power Administration
- California Energy Commission
- California Public Utilities Commission
- Servidyne Systems
- Connecticut Consumer Counsel
- Connecticut Department of Environmental Protection
- Connecticut Department of Public Utility Control
- District of Columbia Public Service Commission
- Duke Energy
- Entergy Corporation
- Environmental Defense
- Exelon
- Food Lion
- Great River Energy
- Idaho Public Utilities Commission
- ISO New England Inc.
- Johnson Controls
- MidAmerican Energy Company
- Minnesota Public Utilities Commission
- National Grid
- Natural Resources Defense Council
- New Jersey Board of Public Utilities
- New Jersey Natural Gas
- New York Power Authority
- New York State Public Service Commission
- North Carolina Air Office
- North Carolina Energy Office
- Ohio Consumers' Counsel
- Pacific Gas and Electric
- Pepco Holdings, Inc.
- PJM Interconnection
- PNM Resources
- Public Advocate State of Maine
- Puget Sound
- Sacramento Municipal Utility District
- Santee Cooper
- Seattle City Light
- Servidyne Systems
- Southern California Edison
- Southern Company
- Tennessee Valley Authority
- Texas State Energy Conservation Office
- The Dow Chemical Company
- Tristate Generation and Transmission Association, Inc.
- USAA Realty Company
- Vectren Corporation
- Vermont Energy Investment Corporation
- Wal-Mart Stores, Inc.
- Washington Utilities and Transportation Commission
- Waverly Light and Power
- Xcel Energy



Observers

- American Gas Association
- American Public Power Association
- Association of Energy Engineers
- Business Council for Sustainable Energy
- Consortium for Energy Efficiency
- Council of Energy Resource Tribes
- Demand Response Coordinating Committee
- Edison Electric Institute
- Electric Power Research Institute
- Energy Programs Consortium
- Gas Appliance Manufacturers Association
- Gas Technology Institute
- National Association of Energy Service Companies
- National Association of Regulatory Utility Commissioners
- National Association of State Energy Officials
- National Council on Electricity Policy
- National Electrical Manufacturers Association
- National Rural Electric Cooperative Association
- North American Insulation Manufacturers Association
- Steel Manufacturers Association



Year One Accomplishments

- Reviewed key barriers to energy efficiency and surveyed policies and programs that have overcome these barriers
- Advanced the five (5) Action Plan Recommendations
- Announced over 90 public statements and commitments to advance energy efficiency through the Action Plan Recommendations
- Produced new resources to support commitments
 - National Action Plan for Energy Efficiency Report
 - Energy Efficiency Benefits Calculator
 - Consumer Energy Efficiency Fact Sheet



Commitments to Energy Efficiency

- Commitments made by stakeholders across 47 states
 - State Utility Commissions – AR, CA, CT, FL, HI, IA, KS, MN, **NJ, NY**, OR, VT, WA
 - Utilities – BPA, **Duke Energy**, Entergy, **Exelon**, **New Jersey Natural Gas**, PNM, Southern Company, Xcel Energy, etc
 - Other state agencies – OH and CT Consumers' Counsel; CA agencies; CT DEP; HI, MN, and OR energy departments; Governors in CA, IA, OR, and UT
 - ISO-NE and MISO
 - End-users – Dow, Eastman Kodak, Food Lion, Wal-Mart, etc
 - Additional partner organizations



Commitments to Energy Efficiency (2)

- Include:
 - Establishing state-level collaborative processes to explore how best to increase investment in energy efficiency
 - Investigating increased funding for cost-effective efficiency
 - Conducting formal investigation on ways utilities can remove the link between revenues and sales volume
 - Including energy efficiency on a consistent and comparable basis with supply-side resources in future resource planning activities
 - Meeting energy savings goals within the range of 10-35%
 - Proactively educating consumers on the benefits
- Progress is already being made



Year Two Work Plan

- Assist leading organizations in achieving their commitments—meaningful progress by summer 2007
- Engage more organizations in making commitments
- Develop new resources to support implementation of the Action Plan recommendations
- Explore approaches to address demand response
- Outreach on the Action Plan and its progress
 - **Regional Implementation Meetings**
- Recognize leadership
- Develop the 20-year vision and plan for where the Action Plan could take energy efficiency over the next twenty years.
 - Results of Regional Implementation Meeting discussions will be integrated into this plan



Upcoming Resources & Activities for States, Utilities and Stakeholders

- Examination of Utility Rate Revenue Stability Mechanisms and Incentives (*Summer 07*)
- Guidebook on Energy Resource Planning and Procurement Processes (integrating energy efficiency) (*Spring 07*)
- Guidebook for Conducting Potential Studies for Cost-Effective Energy Efficiency (*Spring 07*)
- Guidebook on Energy Efficiency Measurement and Verification Protocols (*Summer 07*)
- Building Codes and Energy Efficiency Fact Sheet (*Spring 07*)
- Educational Briefings, sample docket material, and resource lists (*Spring 07*)
- Sector Collaborative on Energy Efficiency (ongoing, June 1st mtg)



Assistance is Available to Help Advance Action Plan Commitments

- Leadership Group and other organizations will:
 - Conduct peer-to-peer information sharing and support
 - Provide education and outreach per their commitments
- DOE/EPA will:
 - Continue to facilitate the Action Plan process, including support for new resources and activities
 - Provide technical assistance to state policy makers and utilities (expanding existing efforts)
 - Share free resources from the ENERGY STAR, buildings, and clean energy programs to utilities and states



For More Information

www.epa.gov/eeactionplan

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